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Emily Pietruszka

Emily.Pietruszka@Colorado.EDU

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Optical Delusions:

Questioning and Shifting the Cyclical Nature of Human Choice, Time,
and the Behaviors of the Greater Universe

Emily Pietruszka



University of Colorado Boulder
Department of Theater & Dance
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Thesis Advisor:

Donna Mejia | Department of Theater & Dance

Committee Members:

Michelle Ellsworth | Department of Theatre & Dance
Penelope Cole | Honors Program
Theodore Stark | Department of Theatre & Dance

Abstract:

Optical Delusions is an eighteen-minute dance performance piece that inquires, and quite literally smashes delusions that have become deeply rooted in the human understanding of personal choice and the concept of time. Inspired by the writings and teachings of physicist Brian Greene and the theories of philosopher and composer Friedrich Nietzsche, melded with my own experiences in harnessing the power of choice, the audience finds themselves questioning the nature of the circles that inherently exist in our universe. The nature of the circles comes to life as the piece utilizes a loop pedal machine following a live-feed, projected feedback loop that brings the space to life. Using mirrors as a metaphor for perception and beyond, the dancers interact with pieces of glass strewn across the space. They are also seen obliterating their own reflections in projected video images. Throughout my process I ask the critical question, how can we initiate change in the perpetual circles that inherently dominate our lives?

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Introduction

Harnessing the ability to experience a different awareness of time and space may be out of reach to humans at this instant of our existence, but what exactly do we have power over when it comes to shaping our reality? Do we have power at all? Could this concept be completely out of our grasp? How do we access agency of our own choices? When we can consciously make the choice to recognize what needs changing in our lives, what are the succeeding actions to take? With the awe-inspiring help of some remarkable dancers' movement and mind power, these questions have taken me on a journey that would forever shape my thoughts about a human's ability to make change, from the micro-personal level to one's incredible potential to shape culture.

If, when I was growing up, my room had been adorned with only a single mirror, my childhood daydreams might have been very different. But it had two. And each morning when I opened the closet to get my clothes, the one built into its door aligned with the one on the wall, *creating a seemingly endless series of reflections of anything situated between them*. It was mesmerizing. I delighted in seeing image after image populating the parallel glass planes, extending back as far as the eye could discern. *All the images seemed to move in unison- but that, I knew, was a mere limitation of human perception*; at a young age I learned of light's finite speed. So in my mind's eye, I would watch light's round-trip journeys. *The bob of my head, the sweep of my arm silently echoed between the mirrors, each reflected image nudging the next. Sometimes, I would imagine an irreverent me way down the line who refused to fall into place, disrupting the steady progression and creating a new reality the informed the ones that followed.*"— Brian Greene, *The Hidden Reality*. (Greene 3 emphasis mine)

Eternal Recurrence

I was in the shower one morning last year. My eyes were closed as I let the water run calmly down my face while the music of my iPod from my roommate's music dock collided with the sound of running water. I let my ears listen for a brief moment, and the steady pulse from Nine Inch Nails' "Beside You in Time" became clear. I made the decision to listen closely to the

lyrics this time. I let my mind act in sync with my breath. “I am all alone this time around...” my brain began buzzing with ideas. I quickly finished showering and raced to my computer to investigate different interpretations of the lyrics, something I enjoy doing when lyrically inclined music perks my interest. One theory stood out above the rest; eternal recurrence, or eternal return, and Friedrich Nietzsche’s theories of this concept. Eternal recurrence is the idea that there is an infinite amount of time in the universe, but only a finite amount of events that can occur. Therefore, these events are bound to repeat themselves in a cyclical manner for eternity. I soon discovered that the entire album, *With Teeth*, created by Nine Inch Nails (2005) is threaded with the concept of eternal recurrence. The album continued to inspire the work created throughout my process.

Nietzsche had a unique perception of eternal return. He called it “the horror of humanity.” The thought that our lives might repeat themselves over and over, and that there was no final goal, no beginning or an end of time, was a crippling for him. Nietzsche states:

What, if some day or night a demon were to steal after you into your loneliest loneliness and say to you: ‘*This life as you now live it and have lived it, you will have to live once more and innumerable times more; and there will be nothing new in it, but everything unutterably small or great in your life will have to return to you, all in the same succession and sequence -- If this thought gained possession of you, it would change you as you are, or perhaps crush you*’ (Nietzsche 341 emphasis mine).

Nietzsche believed that there was no life without suffering, and the only way to counter this inherent, cyclical horror was to test our personal morals and values by creating art and questioning everything. I fell in love with this thought. In my opinion, there is no greater way to seek new perception and find new truth than by making art.

Eternal recurrence reflects an eastern view of time, where neither the chicken, nor the egg came first. Time and nature are now and forever infinitely cyclical; as opposed to a western view

of time that is linear with a beginning, middle, and end. I could not help but think of how this concept reflected events on a macro-universal level as well as a micro-societal level. On a macro-scale, the earth orbits the sun in a cyclical, repetitive manner. Similarly on a micro-scale, the bus picks me up every Tuesday morning to go nanny for a couple hours. I would argue that habits, or patterns that are created in our lives reflect the nature of the greater universe, which I will explain in pages to come.

Habit Gestures and The Circle

I am all alone this time around
 Sometimes on the side I hear a sound
 Places parallel I know it's you
 Feel the little pieces bleeding through
 And on this goes on and on and on and on and on and on and on
 – Nine Inch Nails “Beside You in Time” *With Teeth* Album (2005)

The piece begins in the dark to depict actions that have already been occurring for some time. I begin to slowly roll onto stage on a downward left diagonal, establishing my place in the piece while equally distinguishing my character's role as separate from the rest. One by one the dancers come out and remove pieces of paper from their clothing, mouths, boots, etc. Following this action, they establish themselves in space with a move I call, “infinity thrashing.” I explained the intent of this movement as, “that feeling you get after you've done something horribly stupid and you wish you could step outside yourself and smack some sense into yourself.” Each mover's costume reflects a similar color pallet of black, greys, and dark blues; each decorated with patterns of reflective duct tape to suggest we are all participants in this particular experience of time. The projection in the background is a feedback loop, a live stream projection of moving images against moving images, creating for the audience the effect of “a

seemingly endless series of reflections” (Greene 3). The movements of the dancing bodies seem to reflect on for eternity, setting up a reference point of context for the audience. The gobos on the top down lights race through the infinite reflections in the shape of glass fragments. As I reach the downstage-left corner of the space, the dancers fall into the only phrase of the piece that is completely synchronous, to further establish for the audience that while they are individual beings, their experience of patterns in time are similar in this instance of performance.

In the spring of 2015, I began participating in Alexander Technique classes at CU Boulder, taught by Nada Diachenko. In Alexander, we begin to correct bad movement and postural habits by first recognizing their habitual recurrence in our day-to-day lives. I began to ponder the correlation between this practice in Alexander, the theory of eternal return and the “horror” these habits inflict upon our lives. Do the bad habits in our lives go as unnoticed as easily as habitual movement patterns and the nature of cyclical time?

In our first rehearsal, I instructed my cast to free write for two minutes about personal “bad” habits that they desired to change about themselves. I invited them to read their findings aloud if they wanted. Then, each dancer created personal, gestural phrases symbolizing the written content. My personal phrase included biting my nails, a deep pli  as the knuckles of my right hand press hard against my chin; as well as gestures of drinking too heavily; I look to the sky revealing my throat as my wrists bounce off my thighs with a shrug. I found that my favorite gesture that emerged from this exercise was exhibited throughout the piece: dancer Britt Ford looks out into the audience, appearing to be chewing on something repulsive for a considerable amount of time. This action was personal for her. It was one that reflected the superficial relationships that inhabited her life.

Falling out of the synchronous movement, the dancers simultaneously initiate the next

chapter of the dance: “The Circle.” I created the circle as a movement score. The dancers begin running together in a circle, their steps pace in-sync to create an audible pulse to juxtapose the static murmur of the sound score in the background, and to illustrate a sense of ongoing time for the audience within the physical manifestation of a circle on stage. This is where the logistical purpose of the combat boots comes into play. The boots allow the dancers to hear one another’s paces to keep their steps in sync. While time in this piece is reflected in a cyclical manner, time itself on earth is measured down to the smallest, pulsing increments of light that are emitted from atoms; these broken increments are actually measured here in Boulder. “The frequency at which a cesium atom ticks is the official time keeper for the world” (Greene).

As the circle progresses and pulse has been established, one by one the dancers begin to “fall off” into the center of the circle. This action was informed by watching the men’s skiing slopestyle finalists in this year’s X games. Slopestyle is an event in which skiers interact with and overcome obstacles in a given course such as rails and big air jumps. As I examined the movement of these skiers, I noticed a pattern. When a skier approaches a jump or an obstacle, he revs up, focusing intently on what lies ahead. He must then choose at what moment to jump off, releasing himself from revving up by redirecting momentum, and exactly how he is going to execute that moment. He must choose to choose when that moment happens while he is barreling at a high speed towards an obstacle. He could choose not to, or he could choose to choose (Men’s Ski Slopestyle Highlights – Winter X Games). I thought about how this is reflected in human choice and habitual patterns. We can choose to acknowledge our personal bad habits. Once we have chosen to acknowledge these habits, we can choose to act upon them. We can choose to choose. It is a seemingly small choice with consequently large impacts, similar to the jumping skiers, but it is a moment of the utmost importance for new perception to form.

The dancers choose to choose while running in the circle when they are going to “fall off” into the center to watch the spinning nature of time that surrounds them, depicting that moment of deciding to recognize the cyclical nature of bad habits. They are witnessing their own version of the horror of humanity. They fall out and fall back in as a representation of being stuck in this horror while being conscious of its recurrence. As the score progresses, the dancers begin to relive and physically acknowledge their personal bad habit phrases, all the while being confined to the circle for an overwhelming amount of time. This instance of the performance reads to the audience as a moment where the dancers are watching and observing their environment, but fall back into what is happening without the power to shift the perpetual circle and what is happening inside.

Breaking the Circle?

As I watch the dancers in their cyclical hypnosis, I make the choice to attempt to break the cycle by removing myself from my established place on stage, and running directly through the structure the dancers have created. I jump up into space through them, only to be caught at a moment's notice by the dancers. I am restricted from exiting or breaking through the space altogether.

If we are to have an experience of passing time we need change, and to have change we need cycles. Think of the placement of the sun during the day. If the sun did not change position, we would not have the fundamental understanding of time as we measure it here on earth. The experiences we have are created by a flux; without change there is no experience. That change is created by a cycle, not by a beginning and an end. We understand our experience only in references to other experiences. For this reason I do not believe that cyclical time is something

that we can “break” or “escape.” We learn from our actions in cycles, creating memories from experiences. Breaking implies an illicit stop or discontinued action, which is untrue of a cycle or circle. If we can understand this concept and accept Einstein’s theory of relativity and spacetime, then we know that we cannot truly “break” a habit because the past is not truly gone.

In our day-to-day lives, we experience time as a continuous flow, but it can also be useful to think of time as a series of snapshots or moments, and everything that happens can be thought of as the unfolding of moment after moment after moment. And if we picture all moments or snapshots lined up, every moment here on earth, every moment orbiting the sun, and every moment throughout the entire universe, *we would see every event that has ever happened or will ever happen; every location in space, and each and every moment in time* (Greene emphasis mine).

Our “past” will always be there to remind us of our experiences with patterns that we deem unsuitable for our lives. In my opinion, we can only “jump” at opportunities to shift our perspective by questioning our values. The jump reads clear to the audience as I hurl myself into the dancers. However, I do not break the circle. The contents of the circle, being the dancers themselves, restrain me.



Figure 1: I attempt to break through the space but the dancers hold me back

Talking Relativity/ Our Cosmic Horizon

“See the animal in its cage that you built

Are you sure what side of the glass you are on?”

– Nine Inch Nails “Right Where it Belongs” *With Teeth* Album (2005)

In the early 1900’s, Albert Einstein made the discovery that time is relative, which shattered the formally accepted views of time constructed by Isaac Newton which suggested that “space is distinct from the body, and that time passes uniformly without regard to whether anything happens in the world” (Rynasiewicz). In other words, absolute space and absolute time as separate entities was the accepted belief. Einstein had different thoughts. He suggested that the passing of time is relative to each and every point in the universe. I experience time differently than someone moving at a different pace, and vice versa. Einstein also generated the idea of spacetime, the notion that time and space are not separate entities, but act in relation to one another. So, depending on how fast or slow one is moving in space, one will experience time differently than someone who is moving at a different speed. The concept of time is also altered in relation to gravity; the stronger the gravitational pull, the slower time passes (Greene).

The dancers attempt to verbally illustrate their own personal understanding of spacetime as they narrate their subjective experiences on stage. My goal here was allow the dancers freedom of choice and agency in their movement. As soon as they narrated, or understood consciously to a point of verbalization what they perceived subjectively, according to their spacial and temporal awareness, they were instructed to “shift.” In rehearsal, we practiced what it felt like to intentionally shift and stray from movement habits though an exercise I learned from my composition professor, Gesel Mason, called “parameters.” In parameters, each dancer chooses a song that she is accustomed to improvise comfortably to. The rest of the dancers create a circle, and the moving dancer improvises to her song in the middle of the circle. The dancers sitting in the circle pay close attention to habits and familiarized movement patterns in the

dancer's movement sequences. The sitting dancers articulate for the moving dancer what they observed, and then the song is played again. This time, however, the surrounding dancers offer verbal suggestions to alter the moving dancer's experience with her customary movement patterns.

We considered what this felt like in each of our different experiences. Some expressed that it felt "not as free, as if I was losing a part of who I am." Others said the movement felt watered down and "the opposite of what I'd like." Others felt the movement gave them a thoughtful and considerate insight into their personal habits. This forced me to consider how I feel when I am coerced, or force myself, out of my comfort zone. We often cannot learn about our own habits and relationships with familiar environments until we can allow ourselves to "choose to choose," becoming self-aware and then taking action to step outside of them.

There is a term used in the study of cosmology that illustrates that at any given point in the universe, there is a finite distance from that point that objects can be observed. Greene states:

The important point is that regions of the universe beyond a certain distance are regions currently beyond our observational reach. Much as ships that have sailed beyond the horizon are not visible to someone standing on shore, astronomers say that objects in space that are too far away to be seen lie beyond our cosmic horizon (Greene 32).

From nearby planets to light waves, everything that we, and anyone can observe is within our cosmic horizon. I would argue that this notion is not unlike the human subjective experience. Can't we only experience reality in a way that is shaped and limited within our own subjective awareness? The dancers explore this concept as well as they verbally communicate their experiences on stage. The audience hears and attempts to decipher small phrases and fragmented words that the dancers convey as they improvise about the space. The audience watches encompassing projections in the background that pop in and out of their vision of the same

dancers smashing their reflections in mirrors, actions that parallel the broken mirrors on stage. These smashing actions are not necessarily comprehensible yet, but they foreshadow events to come.

“Remember where you came from

Don’t you fucking know what you are?

Go on get back to where you belong!”

– Nine Inch Nails “You Know What You Are?” *With Teeth* Album (2005)

Smashing the Mirror

The dancers in projected images decide to smash their reflections in mirrors with wrenches and rocks. They recognize their reflections before taking action to obliterate the image in the mirror. After-which their reflections, warped by the beautiful behavior of electromagnetic waves bounding between their bodies and the glass, are seen dancing in the shattered pieces.

The use of mirrors was partially inspired by my experiences in the summer of 2014. I took ballet classes this past summer at Perry-Mansfield performing arts camp, where they purposefully do not mount mirrors in the classroom. Each day I wondered to myself why I felt so incredible in my mind and body after each class. I had not been accustomed to feeling this way, particularly after a rigorous ballet class, in a very long time. Shortly after, I began taking ballet classes again here at CU. I found myself feeling subsequently down about myself. My mind-body connection felt twisted and incomprehensible following each class. I began to wonder if there was any correlation between these feelings and the presence of mirrors in the classroom. I began to observe this idea, and discovered some interesting information about myself in my practice. I found that each time I glanced at my reflection in the mirror, I was looking for nothing

but flaws. My ballet professor, Erika Randall, encouraged us in our movement practice to “see the person we aspire to be, and step into her.” As I look at the two dimensional image of myself in the mirror, my sensory awareness of self begins to silently slip away, and the image becomes the “reality,” which is a terrifying thought. I found that I could not “step into her” while the mirror was there. The mirror was a bombarding reminder of the projections that I perceived to be what people thought of me. In every moment in every combination, my subconscious knew the moments when I could monitor myself in the mirror. The visual image contaminated and eroded physical sensation. I was less aware of my surroundings and less aware of my body as a sensorial, three-dimensional human. It became more and more difficult in class to not judge myself so harshly, solely based upon how I thought others perceived this two-dimensional me in the mirror. The mirror served as a place to compare contextual flaws to non-flaws accordingly. Ballet had turned into a masochistic and angry part of my life once again.

In rehearsal, I wanted to explore the role of mirrors in self-concept. I would ask the dancers to sit in front of the mirror for five minutes, silently, observing themselves in the mirror. Then, we would free-write for three minutes. The pieces of paper that I utilize throughout the performance are the pages that the dancers free-wrote on, only torn apart and segmented.

The discussions we had that followed these mirror practices revealed some compelling insights. We spoke of how looking at one’s reflection, making assessments and “checking yourself out” becomes a subconscious, inherent part of our day-to-day; a habit, for most of us. We asked ourselves, are we really looking at ourselves? Are we looking at something that is truly “us?” If a mirror cannot lie, then what is the truth in it? Why do we judge and create highly instilled and developed perceptions of ourselves through something that is nothing but silver glass that creates a reflection due the behavior of electromagnetic waves?

Dancer Heather Woolley mentions something she learned from guest artist and dancer Raja Feather Kelley, “You’re never going to be able to see who you really are, or what other people see you as; the mirror is the closest you can get.” I cringed at this idea. The mirror is a reference point of extremely subjective judgment, and it always will be. Dancer Britt Ford states, “It is a weird form of self-reflexivity based on something we can never actually know.” We cannot possibly see ourselves from an outside perspective.

Britt has a mirror in her room that she keeps there on purpose. The mirror is broken, and as she looks at her reflection, the image she sees is still “herself” in a sense, but a her that is warped and contorted; giving her a different sense of her own image of herself. The image becomes a different two-dimensional “reality,” which occurs only because the behavior of the light that is bending and shaping the image being reflected back to Britt’s eyes has been shifted from the smashed lines in the mirror. In one instance of this mirror looking practice, dancer Megan Odom made the decision to shift her position from looking at herself in the mirror, to looking at the rest of us who were occupied with looking at our own reflections. She states, “I could create a small righteous anger if I sat here and judged myself in the mirror, which would be the inevitable, but what does it do to re-orient yourself, to change your situation in that reality, to look into the mirror and see something else?” I believe the decision to change is key here, before the shift in perception can take place. For the reasons I have illustrated, it is a delusion of our perception to think that the mirror can be a reference point for our subjective reality. Referencing greek mythology, Narcissus the hunter selfishly fell so in love with merely his reflection in a pool of water that he drowned. Similarly I would argue that it is self-centered of humanity to think that mirrors are a true reference point for reality.

In this piece, the mirror represents a shift waiting to take place. It is perception, quite

literally and as a metaphor. For me, it represents the cyclical nature of bad habits, of judging oneself, a deluded idea of reality and the behaviors of time and space, an optical delusion. In the movies, quite often towards the end, whenever a mirror is smashed it is because the character has reached the final straw, and it is inevitable that change must occur in his or her personal endeavors, decisions, values, etc. We can make the choice to shift perception. We can make the choice to smash the mirror.

THE CLOCK/Cosmic Repetition

The bass sets in, riding the steady rhythm of the ticking clock as the dancers firmly rub their sternums, an action devised from my personal process of calming myself when dealing with the anxiety of passing time. This action is also used in the Alexander Technique to remind



Figure 2: Dancer Megan Odom (back right) catches up with dancer Kara Turner (front) in a similar gesture.

participants of the expansive possibilities of the breath. Their actions quickly juxtapose the previous energy of the piece, initiating a new chapter of the performance.

The audience's

eyes jump from mover to mover as different dancer's actions mirror each other, and fall away, find synchronicity, and break apart in a dynamic flow.

These actions further depict physical actions of the greater universe. To set up my following argument, it is necessary that I quote Brian Greene extensively. Greene refers to different cosmic horizons in the universe as "patches." He states:

In any given patch the particles of matter (more precisely, matter and all forms of energy) can be arranged in only a finite number of different configurations. This means that conditions in the infinity of far-flung patches- in regions of space like the one we inhabit but distributed through a limitless cosmos- necessarily repeat (Greene 33).

I believe Greene is referencing the nature of eternal recurrence here, but specifically the behaviors and arrangement of particles in different parts of the universe, rather than the nature of time as I depicted earlier. Greene says:

Finite energy within a cosmic horizon entails a finite number of particles, be they electrons, protons, neutrons, neutrinos, muons, photons, or any of the other known or as yet unidentified species in the particle bestiary. *Finite energy within a cosmic horizon also entails that each of these particles...has a finite number of distinct possible locations and speeds.* Collectively, a finite number of particles, each of which can have finitely many different positions and velocities, means that within any cosmic horizon *only a finite number of different particle arrangements are available...* the limited number of particle arrangements ensures that with enough patches in the cosmic quilt- enough independent cosmic horizons- the particle arrangements, when compared from patch to patch, *must somewhere repeat* (Greene 37-38 emphasis mine).

This thought of repeating particle arrangements was mind-bendingly horrific for me. The dancers during this parameter of the piece each embody an independent cosmic horizon as they become synchronized and rearrange repeatedly in relation to the other performers.

When we consider the composition of movement, we may think that we have an infinite number of choices when we are molding aesthetic or experiencing space and time within improvisation. However, even the smallest choice of action to step a centimeter forward or two,

can be mathematically calculated from beginning to end, as well as before the beginning and after the end. Our brains are made of particles, as well as everything around us. The interaction of particles between neuronal synapses in the brain and the environment around us create our consciousness. Our choices are made by the way these particles interact. So if this is true, and if the laws of spacetime and relativity, and the laws of motion set up by Isaac Newton already determine time in the “future” down to a mathematical calculation, then are all of our choices already pre-determined? If the arrangements of particles in our cosmic horizon are finite, are our choices also finite? I would argue that this brings into light the question of free will versus fate. Can we even have agency over our own choices if the very nature of particles is not only pre-determined mathematically in time, but also finite and repetitive in nature? Are we doomed to this horror of humanity?

I received feedback from audience members that the live dancers in this instance reminded them of nothing but particles of matter, while the projected images of the dancers, wearing their own clothes and smashing their reflections in mirrors, looked more like real humans making their own choices and owning their own experiences. As the dancers depict this sort of entrapment of particle arrangement and behavior, I remain isolated in the downstage left corner. My primary task during this time is to critically sort through the pieces of paper on the ground, identify the words on each piece, and either choose to discredit the piece or arrange it accordingly with other chosen words. I challenge myself in this instance to shift the arrangement of the words as much as possible, generating new phrases and new meanings with each arrangement. This reflects the previous actions of the dancer’s improvisation within the “talking relativity” section. As the sound of the ticking subsides, I employ the loop pedal to verbalize the phrases I have created. The disjointedness of the words reflects the shattered mirror of

perception. The words are looped into a sound score of overwhelming repetition to act as a transition into the subsequent section of the piece. The audience hears each disjointed word looped in succession. At first, the words seem completely out of context. Once in a while, the looped, disconnected words create distinguishable new phrases for the audience to hear.

The Critical Moment

What if everything around you
 Isn't quite as it seems?
 What if all the world you think you know
 Is an elaborate dream?
 And if you look at your reflection
 Is it all you want to be?
 – “Right Where it Belongs” (2005)

The dancers
 transition smoothly into a
 diagonal line facing
 downstage left, towards me,
 highlighted by an intense
 diagonal wash. As the
 music strengthens, I make a
 clear transition to join them
 in the diagonal. We begin a
 series of detailed,



Figure 3: Series of cannons

choreographed cannons. “The bob of my head, the sweep of my arm silently echoed between the mirrors, each reflected image nudging the next” (Greene 3). This instance of the performance is a reference to the projected live feed at the opening of the piece. Each of the movers’ actions,

including my own, serve as information for the next dancer in line. Back and forth these movements progress as the images of oscillating, multidimensional cubes spin in the background.

The Critical Moment as I understand it through my practice of the Alexander Technique is the essential decision to make change after acquiring the knowledge that bad habits are present in one's movement patterns. "The common denominator of successful efforts to overcome destructive habits is the fundamental decision to change" (Gelb 26). I would argue that once the knowledge of destructive habits is present, it becomes our choice to either continue in our old ways, or to overcome them. But if all choices are pre-determined, how can we harness free will and have agency in these critical moments?

I had a long, enlightening debate concerning this very question one evening with one of the most trusted humans in my life. I argued that if all choices and patterns and time are pre-determined, then what is the point of making any decisions? What is the point of going on if we don't have a say? Are we perpetually stuck in our own version of a cosmic horizon, a circle, a horror of humanity? He argued yes, but only if you choose to believe it. Choosing to choose, I thought to myself. We can choose to accept the larger scheme of things, and by choosing to recognize these patterns, we can either continue to "fall into the circle," or we can "smash the mirror." We have free will if we decide for ourselves that we have the power of choice, otherwise, what's the point? "The key function of intellect is to monitor the effects of habit and determine where changes should be made" (Gleb 33).

Projection

My choice to add film as a component to this piece was not without purpose. In my

opinion, film adds yet another dimension to a performance. If we live in a world where we perceive only three dimensions, then can't projected images that have captured patterns of light that have occurred in the "past" as we understand it, serve as a fourth? I would argue that this concept is not unlike taking a moment to look up at the stars at night; all we are seeing is light that has been emitted millions and billions of years ago that has been traveling for an incredible amount of time to reach our eyes.

Projected against the back wall, the audience watches as the smashing of mirrors is played in reverse aside the images of elegantly rotating cubes. The oscillating cubes are six dimensional animations that are

meant to comment on the limitations of human's three-dimensional reality. The shattered glass in the dancing images on the back wall shimmers and quakes as it swiftly molds itself back into a comprehensible mirror,

seemingly pelting the rock or



Figure 4: The smashing of mirrors is played in reverse behind the series of cannons

wrench back at its' perpetrator. This projection comments on the behavior of time once again, and that our perception of time is deluded and inherently accepted as forward because that is how we have come to understand it. The limitations of the human perception of light and time only allow us to see time as a "forward" projection. Greene states:

But surprisingly, there's nothing in the laws of physics that says events have to unfold through the familiar sequence we call forward in time...according to the

laws of physics this can happen, all I have to do is reverse the velocities of everything (Greene).

In this critical moment instance of the piece, with many elements of the space being employed; dancers, looping words, projections of multidimensional cubes and mirrors being smashed in reverse, the audience is transcended into a place where time and perception become questionable.

Walking Through the Cracks

“What if you could look right through the cracks?

Would you find yourself

Find yourself afraid to see?”

–“Right Where it Belongs” (2005)

Initiating the seceding section of the piece, I begin to tread unsteadily between the broken pieces of mirror that are laid out in a rounded path, after allowing myself to exit the established diagonal. The path encompasses the proscenium from left to right, like a shattered prison holding the space. One by one the dancers follow behind me, creating a line of wobbling movers across the proscenium line. Each mover attempts to catch her balance as she throws her weight between the broken mirrors. The path resembles a part of the circle that has been fragmented, and in these sections the dancers must discover their own route through the pieces.

In this illustration I ask myself, now that we have chosen to “smash the mirror,” what lays behind it? What next? I wrote in my journal back in December, “if the legend of breaking a mirror is bad luck because it releases the souls that the mirror holds within itself, then aren’t we are just storing our souls in pieces of insignificant reflective silver and keeping them imprisoned

in glass? What happens when we intentionally reach through it, break it, set ourselves free, investigate the cracks?” What fills the cracks? What makes shaping new perception worthwhile?

I do not know if many people know the feeling of accidentally breaking a mirror versus intentionally breaking a mirror. It is by far one of the most liberating sensations I have felt, and I have broken a lot of full-body mirrors for the shaping of this piece. The feeling of studying myself in a mirror; perceiving the delusion that this two dimensional me may be the closest I may ever get to understanding how the world sees me, and then demolishing the image of my own accord. It is an exhilarating feeling. The mirror falls to the ground in mere fractions of a second, and the thing that was conveying so much information to my personal psyche just moments ago, is now just a pile of pieces, instantly making all the judgments trivial in the blink of an eye.

In fictional tales, mirrors are often used as portals to unlock some other dimension of the imagination. *Through the Looking Glass-and What Alice Found There* by Lewis Carroll is the sequel to *Alice in Wonderland*, in which Alice finds herself uncovering another whimsical world behind her reflection. It is a world she fills with her own imagination, similar to Wonderland. The place in, or behind the mirror, is a new world where reality is questioned and rearranged by her subconscious creativity, and the mirror is the portal. I would argue that Friedrich Nietzsche would have applauded Alice for her open-mindedness in dealing with her own reality. I would argue that it is a perfect example of questioning one's reality, one's truth, one's morals and values, to shape new perception. Creating, testing, experimenting, and making art, these are the ways to shape new perspective and navigate one's way through the broken mirror pieces.

And a feeling of timelessness, the feeling that what we know as time is only a result of a naïve faith in causality- the notion that A in the past caused B in the present which with cause C in the future, when actually A, B, and C are all part of a pattern that can be truly understood only by opening the doors of perception and

experiencing it (Wolfe 142).

The Irreverent Self/Conclusion

You can live in this illusion
 You can choose to believe
 You keep looking but you can't find the woods
 While you're hiding in the trees
 –“Right Where it Belongs” (2005)

For the duration of my third year of college, I had the experience of a very unique living situation; one that I had never dreamed would be a part of my life. I moved in with three boys, two of whom I did not know well. I was optimistic at first about the living situation. They seemed enthusiastic as well. However, as the year went on, things began to shift and the atmosphere began to change. Respect, between my housemates and myself, began to slowly seep out the doors and windows. I came downstairs every morning expecting to either be insulted, have my insecurities pointed out, be handed a “woman” joke, or find something that belonged to me either broken or burned. My wishes for the house were over looked without a care. One time I had asked them to keep the noise down because I had been in class for twelve hours straight. The response I got was, “this is your fault for moving in with guys.” One time they went into my room while I was away, burned a blanket of mine, and spread it all over the lawn for me to find when I came home. At first I accepted this. When I felt hurt or disrespected, I held it in, or worse, drank. I laughed at the insults, attempting to hand them right back. When I came home I would run upstairs to my bedroom, when I woke up I would dress and eat in my room and then run out the door. For a while I began to purposefully change characteristics of myself, simply to make living with them more bearable. Consequently, I became miserable, continually burying myself with my own actions. By the end of the year I felt like a hollow shell when I entered that

house. I became angry, and even violent at times; the smallest trigger would set me off. I was a ghost of my former self. I wanted so badly not to have to admit to the people that cared about me that this was not a healthy living situation. So I lied, to them, and to myself. It was my own “horror of humanity,” a cyclical nightmare that owned me.

The only remedies for this traumatic situation were nightly rehearsals, and making art. Where else could I be my true self? Making art, and moving in a way that allowed my mind and body to speak to one another were the only ways to let my true self that lied buried six feet under, come up for a breath of fresh air. My sister knows when I am not acting myself. She would casually point it out when I saw her throughout the year. “Why are you acting this way?” My dearest friends would see me and ask, “I don’t know how you are living with them.” I would brush these comments off, insisting that everything was fine. Mostly, I was trying to convince myself. The drinking got worse, until I began to feel terrible in my body. I began to ask myself why I was drinking so much, and why I wasn’t acting like myself. The combination of feeling so terrible, physically and mentally, in conjunction with the comments made by those I knew truly cared about me, finally began to open my eyes. I began to slowly uncover the horrible habits I had created in my life by first questioning my state of being and searching for the reason “behind the mirror.” Only once I had revealed and accepted what I had done, could I truly be honest enough to step into myself again, and begin to heal. Honesty was the key. Once I could be honest with myself, I could begin to be honest with those around me. The importance was in that critical moment, choosing to acknowledge the bad habits, and then choosing to take action.

If we can have agency over our free will, how do we go about harnessing that power? Again, I will reference the circle here. I stand by my argument that it is not about “breaking” the circle. Rather, one must find a way to gain enough truth by testing one’s own personal “horror of

humanity,” then, choose to choose to find a tangent, or reverse the circle. Changing perception by acknowledging pattern will lead to new truth, which will lead to action. Choosing to smash the mirror will allow you to search the cracks to create new experiences based upon new truth. Harnessing the power to have agency over one’s free will may be a personal thing. For me, it is the power of revealing truth and honesty in one’s personal experience. “Sometimes, I would imagine an irreverent me way down the line who refused to fall into place, disrupting the steady progression and creating a new reality the informed the ones that followed” (Greene 3).

My extraordinary teacher and friend, Lauren Beale, taught the performance improvisation class I participated in last semester. She engaged us in a semester long, durational performance of our choosing. Originating from the research I was interested in to inform my thesis, I chose to talk into my computer’s video camera for several minutes. It was a stream of consciousness practice that I performed every few weeks, encompassing the theme, “what I wish I could change,” in a brutally honest way. I wore my moose hat that I use in the piece; little did I know that this hat would eventually become known as “the Truth Hat.” If you wear the truth hat, you have to be honest with yourself, and with those around you. The video that emerges as the dancers are teetering through the glass references this practice. It depicts me, wearing the moose hat, and harnessing the power of free will and truth by placing mirror pieces on my face, eyes, and in my mouth. The feedback I received from the audience referenced on multiple occasions what “eating the glass,” meant for them. I heard everything from “Ouch! That must have hurt!” to comments illustrating the hardships of making choices in a young-adult, transitional time of life.

I began to ask myself in my research and process the question of whether or not changing perception on a personal level can effect change on a larger scale. The term Orenda, coined by

the Iroquois, is “an extraordinary invisible power that is believed to pervade in varying degrees within all animate and inanimate natural objects as a transmissible spiritual energy capable of being exerted according to the will of its possessor” (*Merriam-Webster*). This brings the question of whether or not harnessing truth can become a transmissible energy. How can we create change on a larger scale after we have smashed our own personal mirrors? How can we reverse the circle on a larger scale? How can we truly alter the horrors of humanity? During a rehearsal discussion, dancer Megan Odom quotes distinguished choreographer Liz Lerman, “but if I have lacked the will to push things over, I have gained a lot of momentum by pushing back.” Through setting an example by using personal truth to shift perception, we give ourselves, and others, an opportunity to reverse the circle and make change. Society recognizes the passing of time by events that have occurred, and specifically the changes made by people in these events. We do not recognize progression without change. We do not recognize events in time without the people who have decided to smash the mirror and then chose to act on new perception. Tom Wolfe’s book, *The Electric Kool-Aid Acid Test*, illustrates the culture shift of the 1960’s; a shift that came about when enough people “put on their truth hats” and made clear the faults in society at that time. The patterns-the circle, shifted and reversed with enough momentum is only possible by those who smashed their own mirrors.

The Pranksters never talked about synchronicity by name, but they were more and more attuned to the principle. Obviously, according to this principle, *man does not have free will*. There is no use in his indulging in a lifelong competition to change the structure of the little environment *he seems to be trapped in*. *But one could see the larger pattern and move with it- go with the flow! And accept it and rise above one’s immediate environment and even alter it by accepting the larger pattern and grooving with it- put your good where it will do the most!* (Wolfe 141 emphasis mine).

The piece concludes as I perform a solo that references movement at the opening of the performance. The solo finishes as I begin to run in the opposite direction of the circle that has

been perpetuated throughout the entire performance. A quote by the extraordinary Albert Einstein emerges in the background.

A human being is part of the whole called by us universe, a part limited in time and space. We experience ourselves, our thoughts, and feelings as something separate from the rest, a kind of optical delusion of our consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and for affection for a few persons closest to us. Our task must be to free ourselves from this prison” (*Knowledge of Today*).



Figure 5: Dancers wobble through the glass at the proscenium line as the irreverent self “eats glass” in the imagery behind them.

We can recognize the circle by being honest with ourselves and with those around us. To change culture we first have to change ourselves. We can harness our free will by believing in our own truths. We can choose to smash the mirror; we can choose to take action. We can choose to lead by example. We can choose to be the one who refuses to fall into place. We can choose to find our own path in the cracks.

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